THOSE THOSE

Eugene F. Mooney Secretary

COMMONWEALTH OF KENTUCKY

Site: A.L. Taylol Julian M. Carroll Governor

AND WASTE MANAGEMENT.

DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

BUREAU OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER QUALITY
FRANKFORT, KENTUCKY 40601

MEMORANDUM

TO:

Robert E. Blanz, Director

Division of Water Quality

THRU:

Clyde P. Baldwin, P.E.

Chief Permits & Enforcement Branch

Division of Water Quality

FROM:

David Quarles Da

Divisional Spill Coordinator Division of Water Quality

DATE:

July 2, 1979

SUBJECT: Valley of the Drums

On 28 June 1979 I was accompanied by Hannah Leonard of the Division of Hazardous Materials to the Valley of the Drums in Bullitt County, to update this Division's knowledge of the treatment system maintained by O.H. Materials, Inc. We were met by Bob Kentop, also of Hazardous Materials, who showed us around the site and helped answer our questions concerning the treatment system. Our visit was coordinated so that the system would be in operation upon arrival.

When the collecting pond becomes full of water, Bob contacts O.H. Materials, who then visits the site and treats the pond with alum and a polyelectrolyte in order to coagulate as much solids (silt, etc.) as possible. The aeration ring originally installed in the pond is now covered with mud to such an extent that it is no longer beneficial to use during flocculation. The water is now being mixed by pumping the water out of, and spraying it over the surface of the pond. Overnight settling is allowed before the treatment system is brought on-line.

The treated, flocculated and settled water is pumped from the pond into the first unit by a submersible pump suspended by a cable just below the surface. This water flows upward through a layer of limestone and then enters an aeration basin. Following aeration, the water enters the second unit which is a two part carbon filter. The water first flows up through a layer of carbon and then flows down through another layer of carbon before it exits the system and enters Wilson's Creek.



000154

MEMO David Quarles July 2, 1979 Page -2-

The final step carbon filter was replaced a few weeks ago due to silt clogging. The limestone and initial carbon filters have never been replaced.

DQ:CPB:plt

cc: Bob Logan, Division of Water Quality
Hannah Leonard, Division of Hazardous Materials
and Waste Management